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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|------------------------|---------------------|------------------|
| 10/099,819  | 03/15/2002  | Albert Robinson Seeley | EMPIR-043AUS        | 2785             |
| 22494   | 7590        | 12/13/2004             | EXAMINER            |                  |
| DALY, CROWLEY & MOFFORD, LLP<br>SUITE 101<br>275 TURNPIKE STREET<br>CANTON, MA 02021-2310 |             |                        | MATTHEW, AARON D    |                  |
|   |             |                        | ART UNIT            | PAPER NUMBER     |
|   |             |                        | 2114                |                  |

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/099,819             | SEELEY ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Aaron D Matthew        | 2114                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 March 2002.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-43 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 15,24 and 25 is/are allowed.  
 6) Claim(s) 1-4,8-11,17-20,26-36 and 38-42 is/are rejected.  
 7) Claim(s) 5-7,12-14,16, 21-23, 37 and 43 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 30 July 2002 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>04/15/02,03/15/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:

- Line 9 of page 5 should be changed to read, “virtual agent computer system, and a virtual ~~agent computer system~~ web user system. ”;
- Examiner suggests changing “MS client 106”, on line 9 of page 13, to read, “test client 106”;
- On line 1 of page 14, the multimedia synchronization system is improperly referenced. Examiner suggests changing the reference number from “10” to “100”;

Appropriate correction is required.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Objections***

3. Claims 1-43 have been examined.

4. Claims 12, 15, 16, 21, 24, and 25 are objected to because of the following informalities:

- Line 5, of claim 15, should be changed to read, “with a respective one of the first requests”;
- Line 8, of claims 15 and 16, should be changed to read, “one or more test client computers with”;
- Examiner suggests changing line 12, of claim 16, to read, “one of the second ~~test client~~ requests to the”, to be more in line with the prior language of the claim;
- Examiner suggests that line 2 of claims 12 and 21 should read, “relating number of clients values associated with the respective ones”;
- Line 10, of claims 24 and 25, should be changed to read, “one of more test client computers with”;

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7, 14, 16, 23, and 38-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "the time latency values" in line 1. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests that claim 7 should be indicated as dependent on claim 6, rather than claim 5.

Claims 7, 14, and 23 recite the limitations, "a routing accuracy corresponding to connection between a virtual telephone caller and an agent, and a display accuracy associated with an agent computer screen display," (see lines 22-24 of the claims). As written in the claims, the above limitations are disclosed as corresponding to time latency values, (see lines 1-2 in the claims). However, the examiner asserts that it is apparent that a routing accuracy and a display accuracy do not correspond to time latency values, but, rather, test data available in the preferred embodiment of the invention, (see specification, page 14, lines 10-20). The examiner suggests rewording the claim so as to avoid confusion caused by this discrepancy.

Claim 16 recites the limitation "the first respective one of the first requests" in line 11. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests changing the above limitation to read, "the respective one of the first requests", as prior language in the claim makes reference to a first respective one of

the one or more test client computers, but not a first respective one of the first requests.

Claim 38 recites the limitation "the contact center" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 39-43 are rejected due to their dependence on claim 38.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 8, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Liese et al, (US 5,854,889).

Regarding claim 1, Liese teaches a computer system comprising:

- A synchronization server for synchronizing the operation of one or more virtual test systems, (see col. 4, lines 13-16; and note col. 7, lines 38-43 and col. 3, lines 23-29, wherein the custom servers are disclosed as virtual test

systems, in that they simulate normal user operations in a telecommunication system); and

- One or more test client computers coupled to the synchronization server, (see Abstract, lines 6-7), wherein respective ones of the one or more test client computers generate first requests and second requests to the synchronization server, (see col. 3, lines 10-17).

Claims 8 and 17 are rejected because they recite limitations similar to claim 1, except in the context of a synchronization method and a computer program product comprising a computer usable medium having computer readable code thereon, respectively.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-4, 9-11 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liese et al, as applied to claims 1, 8 and 17 above, and further in view of applicant's admitted prior art.

Regarding claim 2, Liese teaches a computer system, as discussed in reference to claim 1, wherein respective ones of the one or more virtual test systems are coupled to the respective ones of the one or more test client computers, (see col. 4, lines 53-59); and, wherein respective ones of the first requests and respective ones of the second requests are associated with respective ones of the virtual test systems, said test systems comprising a multiplicity of clients to server functions, (see col. 2, lines 5-10).

Liese fails to teach that the one or more virtual test systems are coupled to a contact center associated with contact center functions, and that the one or more virtual test systems include at least one of a virtual telephone caller system associated with virtual telephone caller actions, a virtual agent telephone system associated with virtual agent telephone actions, a virtual agent computer system associated with virtual agent computer actions and a virtual web user system associated with virtual web user actions. However, Liese does teach operating virtual test systems in telecommunication systems comprising automatic response units, and automatic call distributors, (see col. 2, lines 5-10).

Applicant's admitted prior art teaches virtual test systems coupled to a contact center associated with contact center functions, (see page 3, lines 18-30, and page 4, lines 1-8 of the specification), said virtual test systems including a virtual telephone caller system associated with virtual telephone caller actions, a virtual

agent telephone system associated with virtual agent telephone actions, a virtual agent computer system associated with virtual agent computer actions and a virtual web user system associated with virtual web user actions, (see Fig. 1, elements 38, 40, 42, and 44, respectively).

Liese and applicant's admitted prior art are analogous art because they are from the same field of endeavor, viz., virtual testing of telecommunication systems.

At the time of applicant's invention, one of ordinary skill in the art would have considered it obvious to combine the teachings of applicant's admitted prior art with the telecommunications network testing system of Liese in order to achieve a method of synchronizing multiple virtual tests run on a multimedia contact center utilizing those virtual test systems disclosed in applicant's admitted prior art.

One of ordinary skill in the art would have been motivated to combine the teachings because the contact center disclosed in applicant's admitted prior art is a means, well known in the art, for providing fast and automated communication facilitation between customers and customer support agents. Liese teaches synchronizing all virtual tests pertaining to resources within a telecommunication network. Since one of ordinary skill in the art would have been motivated to include, in the method of Liese, a telecommunication system, as taught in applicant's admitted prior art, which facilitates fast and automatic communication between a customer and a customer

support agent, one would also have been clearly motivated to include those virtual tests disclosed therein, which pertain to such a system, to be synchronized as taught in Liese.

Claims 9 and 18 are rejected because they recite limitations similar to claim 2, except in the context of a synchronization method and a computer program product comprising a computer usable medium having computer readable code thereon, respectively.

Regarding claims 3, 4, 10, 11, 19 and 20, see Liese, col. 3, lines 64-67, and col. 4, lines 1-5, wherein the "priority" value is an identifier key value for associating respective ones of the logically related requests.

8. Claims 26-36, and 38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, and further in view of Liese et al.

Regarding claim 26, applicant's admitted prior art teaches a computer system for testing a contact center, comprising:

- A first virtual test system, the first virtual test system to provide a first communication associated with a first media to the contact center, (see Fig. 1, elements 38 and 40); and
- A second virtual test system coupled to the first virtual test system, the second virtual test system to provide a second communication associated with a second media to the contact center, (see Fig. 1, elements 42 and 44).

Applicant's admitted prior art fails to teach that said computer system is adapted to relate a portion of the first communication provided by the first virtual test system to a portion of the second communication provided by the second virtual test system.

Liese teaches a system for heterogeneous telecommunications network testing by a plurality of users, wherein said system is adapted to relate a portion of a first communication provided by a first virtual test system to a portion of a second communication provided by a second virtual test system, (see col. 4, lines 1-18).

Liese further teaches that said communications may be associated with alternative media, (see col. 3, lines 17-20).

At the time of applicant's invention, one of ordinary skill in the art would have considered it obvious to combine the teachings in order to achieve a system for testing a telecommunications network, as taught in applicant's admitted prior art,

wherein portions of communications provided by differing virtual test systems are related.

One of ordinary skill in the art would have been motivated to combine the teachings because Liese shows that there is a need in the art to manage a multiplicity of tests to be performed in a telecommunications network that supports independent testing by a plurality of client computers and virtual test systems, (see col. 2, lines 30-35, and 8-13). One of ordinary skill in the art would have been clearly motivated to relate portions of communications provided by differing virtual test systems, as taught in Liese, in the system of applicant's admitted prior art, in order to prevent interference between said communications in the event that testing resources are limited.

Claims 32 and 38 are rejected because they recite limitations similar to claim 26, except in the context of a method for testing a contact center and a computer program product comprising computer usable medium having computer readable code thereon, respectively. Note, also, that it has been shown, in the discussion related to claim 26, that applicant's admitted prior art teaches both testing a contact center, and providing said communications to the contact center.

Regarding claims 27, 33 and 39, note Fig. 1, elements 28 and 40 of applicant's admitted prior art.

Regarding claims 28, 34, and 40, note Fig. 1, elements 38 and 44 of applicant's admitted prior art.

Regarding claims 29, 30, 35, 36, 41 and 42, note Fig. 1, elements 38, 40, 42 and 44 of applicant's admitted prior art.

Regarding claim 31, see Liese, col. 4, lines 13-16; and note col. 7, lines 38-43 and col. 3, lines 23-29, wherein the custom servers are disclosed as virtual test systems, in that they simulate normal user operations in a telecommunication system.

***Allowable Subject Matter***

9. Claims 15, 24 and 25 are allowed.

10. Claims 5, 6, 12, 13, 21, 22, and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 7, 14, 23 and 43 would be allowable if rewritten to overcome the rejection(s)

under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all  
of the limitations of the base claim and any intervening claims.

12. Claim 16 would be allowable if rewritten or amended to overcome the rejection(s)

under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

13. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 5, the limitation, "wherein the respective ones of the first requests  
and the respective ones of the second requests are provided having number of  
clients values for further associating respective ones of the logically related  
requests," along with the other limitations of the claim, was not found in any prior art.

Regarding claims 12 and 21, the limitation, "relating number of clients values  
associated with the respective ones of the first requests and the respective ones of  
the second requests, to further associate respective ones of the logically related  
requests," along with the other limitations of the claims, was not found in any prior  
art.

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Regarding claim 6, the limitation, "the synchronization server controls the one or more test client computers to provide a measurement of one or more time latency values," along with the other limitations of the claim, was not found in any prior art.

Regarding claims 13 and 22, the limitation, "controlling the one or more test client computers to provide a measurement of one or more time latency values," along with the other limitations of the claims, was not found in any prior art.

Regarding claims 15 and 24, the limitations, "identifying a matching request pair as the respective one of the first requests having the first key value in combination with the respective one of the second requests having the first key value; transmitting a notification of the matching pair from the synchronization server to the first respective one of the one or more test client computers and to the second respective one of the one or more test client computers; and bypassing the portion of the first software program if the notification is received by the first respective one of the one or more test client computers," along with the other limitations of the claims, were not found in any prior art.

Regarding claims 16 and 25, the limitations, "identifying a matching request pair as the respective one of the first requests having the first key value and the first number of clients value in combination with the respective one of the second requests having the first key value and the first number of clients value; transmitting a notification of

the matching pair from the synchronization server to the first respective one of the one or more test client computers and to the second respective one of the one or more test client computers; and pausing execution of the first software program at the portion of the first software program if the notification is received by the first respective one of the one or more test client computers,” along with the other limitations of the claims, were not found in any prior art.

Regarding claims 37 and 43, the limitations, “providing the portion of the first communication to a first test client computer; and providing the portion of the second communication to a second test client computer,” along with the other limitations of the claims, were not found in any prior art.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dantressangle, (US 6,446,120 B1), teaches a configurable stresser for a web server wherein test results received from one or more virtual test browsers are compared and consolidated into a report of compared test results.

Hoffman, (US 6,826,259 B2), teaches a method for testing a telecommunications network by emulating a terminal, wherein keywords are associated with communications.

Zhao et al, (US 6,799,213 B1), teaches a system for performing server load testing wherein a client simulates a plurality of virtual user test actions.

Rowe, (US 6,324,492 B1), teaches a system for network server stress testing wherein multiple concurrent clients are simulated, and response time to an I/O requests is measured.

Goss et al, (US 6,493,447 B1), teaches a contact server for a call center used to synchronize multiple requests transmitted through different media.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron D Matthew whose telephone number is (571) 272-3662. The examiner can normally be reached on Mon-Fri, from 8:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (571) 272-3645. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aaron D Matthew  
Examiner  
Art Unit 2114

ADM

  
ROBERT BEAUSOLIEL  
SUPERVISORY PATENT EXAMINER  
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